

1998 entitled "Serial Media Independent Interface" which are incorporated herein by reference for all purposes.

IN THE CLAIMS:

Please replace the indicated claims with the following amended claims:

1. (amended) A method of communicating between a media access control layer and a physical layer, comprising:

sending a 100 MHz time-division multiplexed signal on a receive data line ;

sending a time-division ^{synchronously} multiplexed receive control signal on a receive control

line;

sending a 100 MHz time-division multiplexed signal on a transmit data line;

sending a time-division multiplexed transmit control signal on a transmit control line.

2. (amended) The method of claim 1 wherein the time-division multiplexed receive control signal includes 4 bit segments and wherein each 4 bit segment includes a synchronization bit.

3. (amended) The method of claim 2 wherein the receive data line includes 4 bit segments and wherein the beginning of a 4 bit segment is determined by the synchronization bit.

4. (amended) The method of claim 1 wherein the time-division multiplexed receive control signal includes 4 bit segments and wherein each 4 bit segment includes a receive data valid bit.

5. (amended) The method of claim 1 wherein the time-division multiplexed receive control signal includes 4 bit segments and wherein each 4 bit segment includes a receive error bit.

6. (amended) The method of claim 1 wherein the time-division multiplexed receive control signal includes 4 bit segments and wherein each 4 bit segment includes a carrier sense bit.

7. (amended) The method of claim 1 wherein the time-division multiplexed transmit control signal includes 4 bit segments and wherein each 4 bit segment includes a synchronization bit.

8. (amended) The method of claim 7 wherein the transmit data line includes 4 bit segments and wherein the beginning of a 4 bit segment is determined by the synchronization bit.

9. (amended) The method of claim 1 wherein the time-division multiplexed transmit control signal includes 4 bit segments and wherein each 4 bit segment includes a transmit enable bit.

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10. (amended) The method of claim 1 wherein the time-division multiplexed transmit control signal includes 4 bit segments and wherein each 4 bit segment includes a transmit error bit.

11. (amended) The method of claim 1 further including indicating the speed of the PHY using the receive data line.

12. (amended) The method of claim 11 wherein indicating the speed of the PHY using the receive data line includes including an interface speed bit in a data segment when a receive control segment indicates no carrier sense, no receive data valid and no receive error.

13. (amended) The method of claim 1 further including buffering data transmitted from the PHY to the MAC using an elasticity buffer that is at least 27 bits long.

14. (amended) The method of claim 1 further including buffering data transmitted from the PHY to the MAC using an elasticity buffer that long enough to buffer an entire frame of data from a data source having a clock with a frequency tolerance of 0.1%.

15. (amended) An interface between a first media access control layer and a second media access control layer, consisting essentially of:

a time-division multiplexed receive data line;

a time-division multiplexed receive control line;

a time-division multiplexed transmit data line;

a time-division multiplexed transmit control line.

16. (amended) A media access control layer to physical layer interface consisting essentially of:

a common clock;

a time-division multiplexed receive data line;

a time-division multiplexed receive control line;

a time-division multiplexed transmit data line;

a time-division multiplexed transmit control line.

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17. (new) The interface of claim 16, wherein said time-division multiplexed receive control line contains signals comprising a receive data valid signal, a receive error signal and a carrier sense signal.

18. (new) The interface of claim 16, wherein said time-division multiplexed transmit control line contains signals comprising a transmit enable signal and a transmit error signal.

REMARKS

Claims 1-18 are pending in the application. Favorable reconsideration of the application is respectfully requested.

Drawings

The objection to the drawings is noted. Applicants propose to amend the drawings by addition of a --Prior Art-- legend to Figs. 1A, 1B and 2 in accordance with the red-lined copies of the drawings accompanying this response. Formal drawings, including the changes requested by the Examiner, will be submitted upon indication of allowable subject matter.

Objections to the Specification

The specification was objected to due the use of acronyms in the Abstract. Also, the insertion of Patent numbers and corresponding to cited applications on page 1 was requested. Application No. 09/088,956 remains pending. The specification has been amended substantially in accordance with the Examiner's suggestions. Accordingly, withdrawal of the objections is respectfully requested.

Claim Objections

The claims have been rejected due, in part, to the use of acronyms. The claims have been amended to remove the acronyms and other changes made substantially in accordance with the Examiner's suggestions. Withdrawal of the objections is respectfully requested.

Double Patenting

Claim 16 is rejected under the judicially-created doctrine of obviousness-type double patenting as being unpatentable over claims 17-19 of U.S. Patent No. 5,953,345. Claims 1-15 are provisionally rejected under the judicially-created doctrine of obviousness-type double patenting as being unpatentable over claims 21, 26 and 31 of co-pending application No. 09/088,956.